

Work Order ID 156411

Friday, January 27, 2017 1:58:29 PM

156411

Page 1

Item ID: D4635-042

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Fwd Ceiling Panel Assembly, RH

Start Date: 1/16/2017 Start Qty: 1.00

1

Cust Item ID:

Required Date: 1/27/2017 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals:

Process Plan:

DAS
21
9-89

Date:

FEB 02 2017

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4635	F								DAS 07 9-89
100		0.00							
100									
HandThermo	Memo	0.00							
Hand Finishing Thermoforming	Pick Kit								17/03/21
110		0.00							DAS 07 9-89
110									
Small Fab	Memo	0.18							
Small Fab	1- Assemble as per Dwg D4635-042								17/03/21
	2-Install speakers								
	3- Install Air valves								
	4-Install Wiring Harness								
	5-Install wiring harness								

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step #: _____		QTY Effective : _____			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
								Completed By 	
								Lead hand / Supervisor Approval Verification 	
QC / QA Coordinator Approval 									

Root Cause				FAULT CATEGORY			
Environment ☐	☐ No Re-verification	☐ Pressure/Forced	☐ Temperature/Cure	☐ Power Loss/Surge	☐ Positioned Wrong		
Design ☐	☐ Operator	☐ Bending	☐ Set-up	☐ Folio/Program	☐ Outside Dimensions		
Doc/Data ☐	☐ Offset/Setup	☐ Centre Not Concentric	☐ BOM/Route	☐ Grain	☐ Over/Under tolerance		
Equip/Tooling ☐	☐ Supplier	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Part Incorrect		
Handling/Pre ☐	☐ Training	☐ Crimp/Kink/Ripple/Wave	☐ Inspection Incomplete/Unqualified	☐ Wrong Stock Pulled	☐ Part Lost/Missing		
Material ☐	☐ Use for Testing	☐ Cuffs	☐ Contamination	☐ Out of Sequence	☐ Part Moved		
Internal Transport ☐	☐ Poor Information	☐ Crushing	☐ Countersink	☐ Off-set	☐ Drawing		
Tribal Knowledge ☐	☐ Rushing	☐ Heat Treat	☐ Cut Too Short	☐ Mislabeled	☐ Finish		
LOA ☐	☐ Product Improvement	☐ Wave/Twist in Tube	☐ Instructions Incomplete/Unclear	☐ Fit/Function	☐ Misread		
Substation ☐	☐ Process Improvement	☐ Marks/Chatter	☐ Drill Holes	☐ Misaligned/off center	☐ Turning Sequence		
Past Expiry Date ☐	☐ Manufacturing Process	OTHER : _____					
Misidentified ☐	☐ Past Due						

Work Order ID 156411

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156411

Page 2

Item ID: D4635-042 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Fwd Ceiling Panel Assembly, RH
Start Date: 1/16/2017 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 1/27/2017 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00				<u>1</u>			DAS 38 9-89 APR 18 2017
130 *130* Packaging Packaging	Identify as per dwg & Stock Location: <u>PE6</u> Memo	0.00 0.00				<u>1</u>			DAS 9-89 JUN 07 2017
140 *140* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.02							17/6/12 <u>df</u> JUN 07 2017

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Picklist Print

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Page 1

Work Order ID: 156411

156411

Parent Item: D4635-042

D4635-042

Parent Item Name: Fwd Ceiling Panel Assembly, RH

Start Date: 1/16/2017

Required Date: 1/27/2017

Start Qty: 1.00

Required Qty: 1.00

Comments:

IPP Rev. A 12/08/09 New Issue DL
12/11/08 Doc Release DL
Update 13/07/09 DL verf:DD
13/12/09 DL
Ipp Rev. E Dwg Update 14/01/09 DL
Dwg. Update 15/01/27 DL

IPP Rev B
IPP Rev. C Dwg.
IPP Rev D Dwg Update
IPP Rev. F

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4652-5		Manufactured	No			100	Each	0.0000	2	2			DAS 07 9-89
D4652-5									**				17/03/16
Air Valve, 1.25 Id Disk Type													DAS 07 9-89
MS24693-BB51		Purchased	No			100	Each	373.0000	8	8			DAS 07 9-89
MS24693-BB51									**				17/03/16
Screw													
					<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>						
					ST288	373							
					m128057	373							
D4635-142		Manufactured	No			100	Each	0.0000	1	1			DAS 07 9-89
D4635-142									**				17/03/16
Fwd Ceiling Replacement Panel Assembly, RH													DAS 07 9-89
D4646-1		Manufactured	No			100	Each	22.0000	2	2			DAS 07 9-89
D4646-1									**				17/03/16
Plenum Cap Assembly													
					<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>						
					MF009	22							
					154711	22							

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Picklist Print

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Work Order ID: 156411

156411

Parent Item: D4635-042

D4635-042

Parent Item Name: Fwd Ceiling Panel Assembly, RH

Start Date: 1/16/2017

Required Date: 1/27/2017

Start Qty: 1.00

Required Qty: 1.00

D4655-1

Manufactured No

100 Each

23.0000

2

2

D4655-1

Speaker

DAS
07
9-89

12/03/16

Location

Loc Qty

Loc Code

MF002

23

117634

5

154865

18

D4708-9

Manufactured No

100 Each

17.0000

2

2

D4708-9

Lanyard

DAS
07
9-89

12/03/16

Location

Loc Qty

Loc Code

MF004

17

150077

2

154884

15

D4728-042

Manufactured No

100 Each

14.0000

1

1

D4728-042

RH Cabin Speaker #1

DAS
07
9-89

12/03/16

Location

Loc Qty

Loc Code

MF002

4

124148

4

MF009

10

124148

10

D4728-044

Manufactured No

100 Each

14.0000

1

1

D4728-044

RH Cabin Speaker #2

DAS
07
9-89

12/03/16

Location

Loc Qty

Loc Code

MF002

4

124458

4

MF009

10

124458

10

Friday, January 27, 2017 1:58:31 PM

Shop Packet Print

Page 2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____		
Description Work Order Deviation				Disposition					

Root Cause			FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____						
Misidentified	☐	Past Due	☐							

Picklist Print

Friday, January 27, 2017 1:58:31 PM

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Work Order ID: 156411

156411

Parent Item: D4635-042

D4635-042

Parent Item Name: Fwd Ceiling Panel Assembly, RH

Start Date: 1/16/2017

Required Date: 1/27/2017

Start Qty: 1.00

Required Qty: 1.00

D4743-1 Manufactured No

100 Each 12.0000 2 2

D4743-1

Speaker Grill

DAS
07
9-89

17/03/16

Location

Loc Qty

Loc Code

MF005

12

149065

4

154770

8

MS21044-N08

Purchased No

100 Each 170.0000 8 8

MS21044-N08

Nut

DAS
07
9-89

17/03/14

Location

Loc Qty

Loc Code

ST302

170

m131452

12

m136502

58

m136537

100

MS21919-WDG8

Purchased No

100 Each 45.0000 6 6

MS21919-WDG8

Clamp

DAS
07
9-89

17/03/14

Location

Loc Qty

Loc Code

over008

36

m136537

36

ST293

9

m136502

9

NAS1149DN832J

Purchased No

100 Each 1,548.000 8 8

NAS1149DN832.J

Washer

DAS
07
9-89

17/03/16

Location

Loc Qty

Loc Code

ST264

1548

M135297

1548

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date : _____	Step #: _____	QTY Effective : _____		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

8

7

6

5

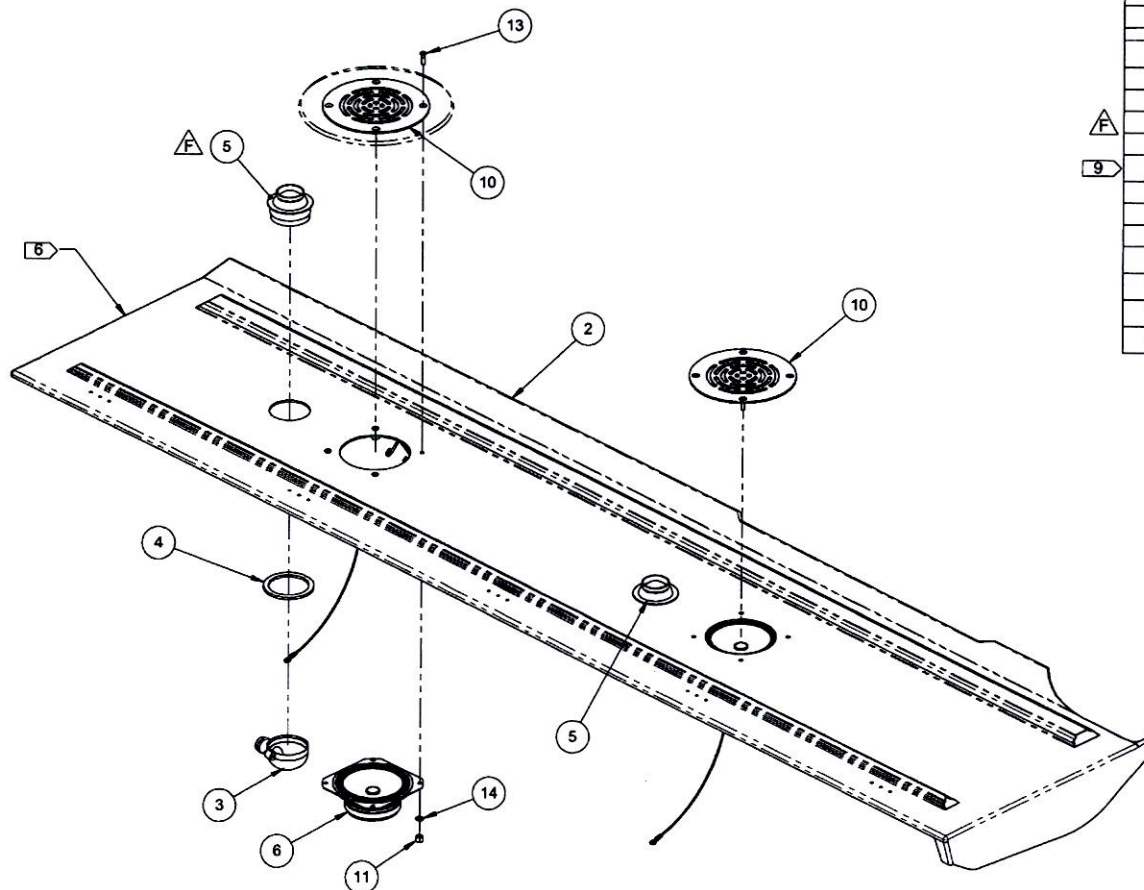
4

3

2

1

ITEM	QTY -042	P/N	DESCRIPTION
1	X	D4635-042	RH, FWD CEILING PANEL ASSY
2	1	D4635-142	RH, FWD CEILING REPLACEMENT PANEL ASSY
3	2	D4646-1	PLENUM CAP ASSEMBLY
4	2	D4652-3 (REF)	MOUNTING NUT (PART OF D4652-5)
5	2	D4652-5	AIR VALVE, 1.16 ID DISK TYPE
6	2	D4655-1	SPEAKER
7	2	D4708-9	LANYARD
8	1	D4728-042	RH SPEAKER #1 HARNESS ASSY
9	1	D4728-044	RH SPEAKER #2 HARNESS ASSY
10	2	D4743-1	SPEAKER GRILL
11	8	MS21044-N08	NUT, SELF-LOCKING
12	6	MS21919WDG8	CLAMP
13	8	MS24693-BB51	SCREW, CSK 100°
14	8	NAS1149DN832J	WASHER



D4635-042 RH, FWD CEILING PANEL ASSY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.4, ON SMOOTH SIDE
- 7) WEIGHT: 8.0 lbs
- 8) INSTALL D4728-042/-044 WIRE HARNESS PER QSI 048
- 9) ON D4708-9 LANYARD OPEN TO Ø0.196 BOTH ENDS

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 156411 MWS
170202

RELEASED

2015 JAN 26 4P

APPROVED

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	RF		
CHECKED	AK	DRAWING NO.	REV. F
MFG. APPR.	DL	D4635	SHEET 3 OF 18
APPROVED	HS	TITLE	SCALE
DE APPR.	D3	OUTBOARD CEILING PANELS	NTS
DATE	14.11.28	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

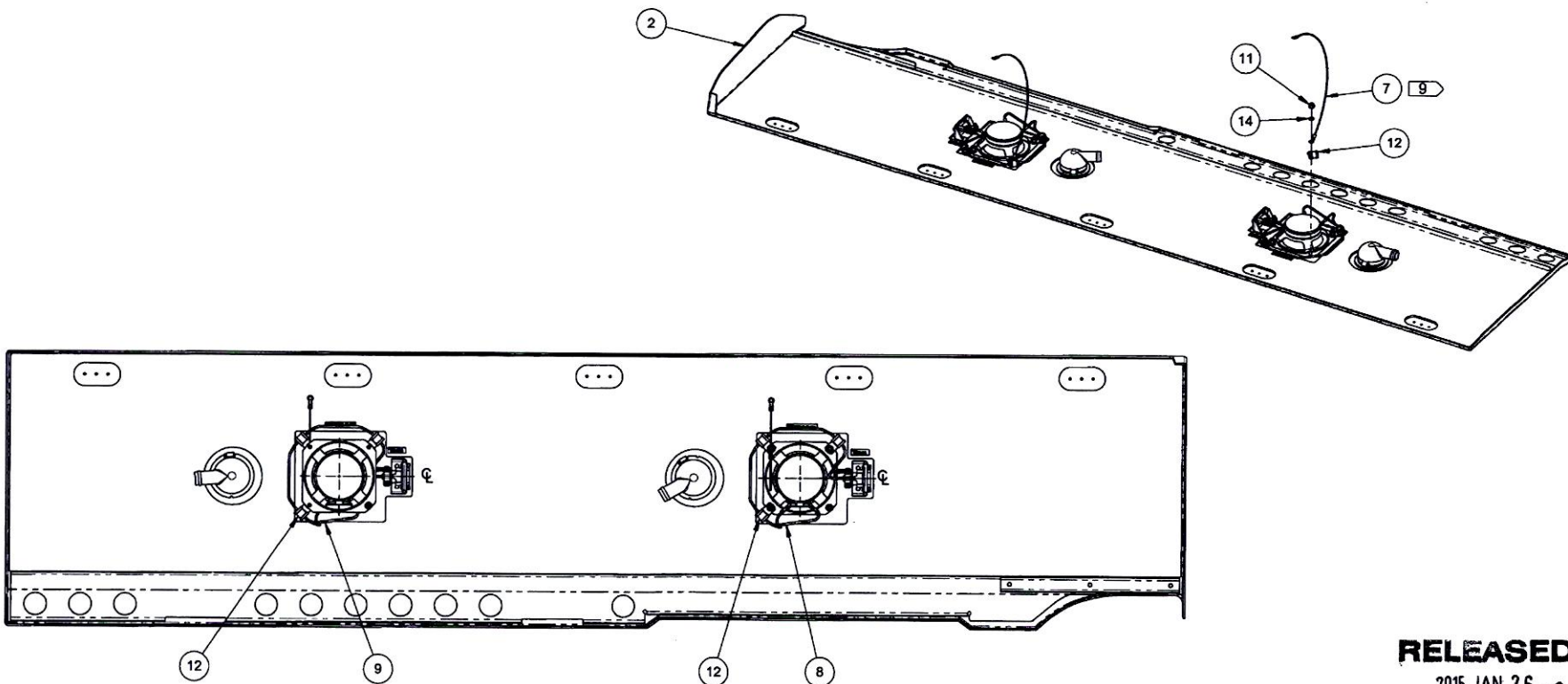
8 7 6 5 4 3 2 1

D

C

B

A



D4635-042 RH, FWD CEILING PANEL ASSY
AUXILIARY VIEW

RELEASED

2015 JAN 26 *cp*

APPROVED

DESIGN	RF	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	REV. F
DRAWN	RF		
CHECKED	AK	DRAWING NO.	SHEET 4 OF 18
MFG. APPR.	DL	D4635	
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	OUTBOARD CEILING PANELS	NTS
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8 7 6 5 4 3 2 1